GEORGIA INSTITUTE OF TECHNOLOGY
Engineering Experiment Station

PROJECT INITIATION

Date: January 2, 1975

Project Title: A Program of Engineering and Technical Assistance for Coggins Granite Industries, Inc.

Project No.: A-1707

Project Director: R. L. Tessner

Sponsor: Coggins Granite Industries, Inc.

Effective Dec. 30, 1974 Estimated to run until Dec. 29, 1975

Type Agreement: Std. Ind. Res. Proj. Amount: $ 10,967

Reports Required: Monthly

Sponsor Contact Person (s):

Mr. Frank Coggins
Coggins Granite Industries, Inc.
P.O. Box 250
Elberton, Georgia 30635

Assigned to INDUSTRIAL DEVELOPMENT Division

COPIES TO:

- ☐ Project Director
- ☐ Director
- ☐ Assistant Director
- ☐ GTRI
- ☐ Division Chief (s)
- ☐ Branch Heads
- ☐ Service Groups
- ☐ Patent Coordinator
- ☐ Photographic Laboratory
- ☐ Security, Property, Reports Coordinator
- ☐ EES Accounting
- ☐ EES Supply Services
- ☑ Library
- ☐ Office of Computing Services
- ☐ Project File
- ☐ Other Sue Corbin
  Bonnie Wattlaufer

RA–73

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION

SPONSORED PROJECT TERMINATION

Date: April 28, 1978

Project Title: A Program of Engineering and Technical Assistance for Coggins Granite Industries, Inc.

Project No: A-1707

Project Director: R. L. Tessner

Sponsor: Coggins Granite Industries, Inc.

Effective Termination Date: 12/29/77

Clearance of Accounting Charges: All clear.

Grant/Contract Closeout Actions Remaining:

Overrun to be transferred to a Lab "E" account.

- X Final Invoice ~~and Closing Documents~~
- _ Final Fiscal Report
- _ Final Report of Inventions
- _ Govt. Property Inventory & Related Certificate
- _ Classified Material Certificate
- _ Other _____

Assigned to: Technology & Development Laboratory (School/Laboratory)

COPIES TO:

Project Director
Division Chief (EES)
School/Laboratory Director
Dean/Director—EES
Accounting Office
Procurement Office
Security Coordinator (OCA)
Reports Coordinator (OCA)
Library, Technical Reports Section ✓
Office of Computing Services
Director, Physical Plant
EES Information Office
Project File (OCA)
Project Code (GTRI)
Other _____

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ENGINEERING EXPERIMENT STATION
GEORGIA INSTITUTE OF TECHNOLOGY

Industrial Development Division

Augusta Area Office
624 Greene Street
Augusta, Georgia 30902
724–9601 Area Code 404

February 12, 1975

Mr. Frank Coggins, Jr.
Coggins Granite, Inc.
P. O. Box 250
Elberton, Georgia 30635

Project Title: Technical Assistance to Coggins Granite, Inc.
Project Number: A-1707 Percent of time: 22.1

Dear Frank:

I am pleased to report the following activities for the period from January 3 to January 22:

1. Met with the supervisory personnel of the company and toured the various operations of the company.

2. Studied the layout of the monument plant to see if the layout can be improved. In general, the layout is of the type usually used in job shop type companies, that is machines and jobs are grouped by function, not by product flow. This situation is best illustrated by granite under bronze. This is the most numerous product but it has one of the longest path through the plant. Each of the 22,000 plus units is picked up and moved five unnecessary times. That amounts to 110,000 unnecessary moves per year. As soon as a plant layout can be drawn up a new layout based on product flow will be produced.

3. An improved lighting system was suggested for use in the monument plant. The improved lighting will result in an $80.80+ saving in electricity usage for each 1500 watt fixture per year. This figure will improve when Georgia Power gets their increased rate. This will also save $18.00+ a year in light bulbs. All with approximately a 3% increase in lighting levels. Mr. Thornton has sent for bids and will order a number of units for test purposes.

Yours truly,

R. Lynnard Tessner
Research Engineer
Augusta Area Office

RLT/jh

cc: Ben E. James, Jr. (3)

ENGINEERING EXPERIMENT STATION
GEORGIA INSTITUTE OF TECHNOLOGY

Industrial Development Division

Augusta Area Office
624 Greene Street
Augusta, Georgia 30902
724–9601 Area Code 404

March 12, 1975

Mr. Frank Coggins, Jr.
Coggins Granite, Inc.
P. O. Box 250
Elberton, Ga. 30635

Project Title: Technical Assistance to Coggins Granite, Inc.
Project Number: A-1707 Percent of time: 30

Dear Frank:

I am pleased to report the following activities for the period from January 23 to February 22:

1. Checked the ratio of steel in 1/4" wire to that of 3/8" wire. A 1/4" wire has 1.77 times as much steel as a 3/16" wire, but a 3/8" wire has 2.25 times the steel that is contained in a 1/4" wire. If wire life is proportionate to steel content then the life of a 3/8" wire should be greater than two weeks. Mr. Thornton is checking into the possibility of getting some 3/8" to use for a test run.

2. While waiting for supplies to do a plant layout I have started studying the quarrying operation and saw plants. The saw plants are in very poor condition. Every wire saw has a down feed but not one works. Wheels and bearings appear to have very short lives, maintenance is only of the fire fighting type, no preventive maintenance is being used. Nothing works if somehow production can be gotten without the broken part. As a result, sawing is being produced that should never have been produced in the first place. The result is greatly increased cost for grinding and lower production in the monerial plant.

3. Took wire samples to Atlanta to have them pull tested to get the breaking strength of different size wires. Also had new splices cut out for testing in Atlanta. At Berkley, an acetylene torch is being used to join the wire. At the spur a propane torch is being used. Two tests will be made of each type splice to see which is stronger. Also had some samples welded on a band saw welder to see if this might give even stronger splices. A welded joint would remove the problem of splicing a left hand twist to a right hand twist.

4. Took "muck" sample from second concrete bucket to find the grain sizes, as requested by Johnny Webb.

5. Requested Mr. Thornton get a copy of tinsel strength for silver solder presently being used and asked what other strengths are available.

6. Had bearings installed on shaft of saw at Berkley, it was felt that this would reduce wear on the wheel bearings by at least 50%. Checked the results with a strobe light. The shaft is turning approximately 290 rpm, the wheels are turning 310 rpm. The result is only approximately 20 rpm for the wheel bearings instead of 310 rpm. Bearing life should be greatly increased as a result.

Very truly yours,

R. Lynnard Tessner
Research Engineer
Augusta Area Office

RLT/jh

cc: Ben E. James, Jr. (3)